

# ภาคผนวก ค-10

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ความเข้มแสงสว่างในบริเวณการทำงาน



## Analysis / Test Report

**Client** : Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O** : สัญญาเลขที่4600001511  
**Project Name** : Monitoring EIA  
**Project Location** : GNC

**Lot ID: 2215740**

Date Received : Mar 28, 2022  
Date Reported : Mar 30, 2022  
Report Number : 2272851-1

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Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
Spot - Administration Building : Admin Manager Table									
1	2215740-1	24 Mar 2022	Day time	1	489	-	400-500	-	Pass
Spot - Administration Building : Admin Officer Table									
2	2215740-2	24 Mar 2022	Day time	1	490	-	400-500	-	Pass
Area - Administration Building : Admin Walkway									
3.1	2215740-3	24 Mar 2022	Day time	1	651	557.0	50	100	Pass
3.2	2215740-4	24 Mar 2022	Day time	2	500				
3.3	2215740-5	24 Mar 2022	Day time	3	520				
Area - Administration Building : Canteen and Pantry Kitchen									
4.1	2215740-6	24 Mar 2022	Day time	1	591	588.5	150	300	Pass
4.2	2215740-7	24 Mar 2022	Day time	2	586				
Spot - Administration Building : EHS Room Tabel 1									
5	2215740-8	24 Mar 2022	Day time	1	461	-	400-500	-	Pass
Area - Administration Building : Master document Room									
6.1	2215740-9	24 Mar 2022	Day time	1	450	431.0	150	300	Pass
6.2	2215740-10	24 Mar 2022	Day time	2	412				
Area - Administration Building : Meeting Room 1									
7.1	2215740-11	24 Mar 2022	Day time	1	412	413.3	150	300	Pass
7.2	2215740-12	24 Mar 2022	Day time	2	417				
7.3	2215740-13	24 Mar 2022	Day time	3	411				
Area - Administration Building : Men Toilets									
9.1	2215740-14	24 Mar 2022	Day time	1	361	289.0	50	100	Pass
9.2	2215740-15	24 Mar 2022	Day time	2	217				
Spot - Administration Building : Photocopier									
10	2215740-16	24 Mar 2022	Day time	1	461	-	400-500	-	Pass
Spot - Administration Building : Plant Manager Table									
11	2215740-17	24 Mar 2022	Day time	1	561	-	400-500	-	Pass
Spot - Administration Building : Purchasing Officer Table									
12	2215740-18	24 Mar 2022	Day time	1	540	-	400-500	-	Pass
Area - Administration Building : Walkway in Front of Reception									
13.1	2215740-19	24 Mar 2022	Day time	1	655	626.0	50	100	Pass
13.2	2215740-20	24 Mar 2022	Day time	2	597				

Technical Management

Supot Salamteh  
Section Head

Approved by

Wichan Choonharat  
Assistant Manager

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**P/O** : สัญญาเลขที่4600001511  
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**Project Location** : GNC

**Lot ID: 2215740**

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Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
Area - Administration Building : Women Toilets									
14.1	2215740-21	24 Mar 2022	Day time	1	371	375.5	50	100	Pass
14.2	2215740-22	24 Mar 2022	Day time	2	380				

**Measurement by** : Norranon Tathongkham Personnel of ALS Laboratory Group (Thailand) Co., Ltd.

**Guideline** : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

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418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O** : สัญญาเลขที่4600001511  
**Project Name** : Monitoring EIA  
**Project Location** : GNC

**Lot ID: 2215743**

Date Received : Mar 28, 2022  
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Report Number : 2272853-1

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Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
	Spot - Control Building : 1st Floor : MCC Room หน้าตู้ 1								
1	2215743-1	24 Mar 2022	Night time	1	452	-	200-300	-	Pass
	Spot - Control Building : 1st Floor : MCC Room หน้าตู้ 2								
2	2215743-2	24 Mar 2022	Night time	1	417	-	200-300	-	Pass
	Spot - Control Building : 1st Floor : MCC Room หน้าตู้ 3								
3	2215743-3	24 Mar 2022	Night time	1	409	-	200-300	-	Pass
	Spot - Control Building : 1st Floor : MCC Room หน้าตู้ 4								
4	2215743-4	24 Mar 2022	Night time	1	341	-	200-300	-	Pass
	Spot - Control Building : 1st Floor : MCC Room หน้าตู้ 5								
5	2215743-5	24 Mar 2022	Night time	1	309	-	200-300	-	Pass
	Spot - Control Building : 1st Floor : Switchgear and Electrical : Room No.1								
6	2215743-6	24 Mar 2022	Day time	1	517	-	200-300	-	Pass
	Spot - Control Building : 1st Floor : Switchgear and Electrical : Room No.10								
7	2215743-7	24 Mar 2022	Day time	1	340	-	200-300	-	Pass
	Spot - Control Building : 1st Floor : Switchgear and Electrical : Room No.2								
8	2215743-8	24 Mar 2022	Day time	1	512	-	200-300	-	Pass
	Spot - Control Building : 1st Floor : Switchgear and Electrical : Room No.3								
9	2215743-9	24 Mar 2022	Day time	1	311	-	200-300	-	Pass
	Spot - Control Building : 1st Floor : Switchgear and Electrical : Room No.4								
10	2215743-10	24 Mar 2022	Day time	1	320	-	200-300	-	Pass
	Spot - Control Building : 1st Floor : Switchgear and Electrical : Room No.5								
11	2215743-11	24 Mar 2022	Day time	1	340	-	200-300	-	Pass
	Spot - Control Building : 1st Floor : Switchgear and Electrical : Room No.6								
12	2215743-12	24 Mar 2022	Day time	1	392	-	200-300	-	Pass
	Spot - Control Building : 1st Floor : Switchgear and Electrical : Room No.7								
13	2215743-13	24 Mar 2022	Day time	1	366	-	200-300	-	Pass
	Spot - Control Building : 1st Floor : Switchgear and Electrical : Room No.8								
14	2215743-14	24 Mar 2022	Day time	1	370	-	200-300	-	Pass
	Spot - Control Building : 1st Floor : Switchgear and Electrical : Room No.9								
15	2215743-15	24 Mar 2022	Day time	1	351	-	200-300	-	Pass
	Area - Control Building : 1st Floor : Walkway No.1								
16.1	2215743-16	24 Mar 2022	Day time	1	752	751.0	50	100	Pass
16.2	2215743-17	24 Mar 2022	Day time	2	750				

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**Project Location** : GNC

**Lot ID: 2215743**

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Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
Area - Control Building : 1st Floor : Walkway No.2									
17.1	2215743-18	24 Mar 2022	Day time	1	766	768.5	50	100	Pass
17.2	2215743-19	24 Mar 2022	Day time	2	771				
Area - Control Building : 1st Floor : Walkway No.3									
18.1	2215743-20	24 Mar 2022	Day time	1	710	716.0	50	100	Pass
18.2	2215743-21	24 Mar 2022	Day time	2	722				
Area - Control Building : 1st Floor : Walkway No.4									
19.1	2215743-22	24 Mar 2022	Day time	1	734	735.0	50	100	Pass
19.2	2215743-23	24 Mar 2022	Day time	2	736				
Area - Control Building : 1st Floor : ทางเดินบันได #1									
20.1	2215743-24	24 Mar 2022	Day time	1	520	571.0	50	100	Pass
20.2	2215743-25	24 Mar 2022	Day time	2	622				
20.1	2215743-26	24 Mar 2022	Night time	1	359	359.5	50	100	Pass
20.2	2215743-27	24 Mar 2022	Night time	2	360				
Area - Control Building : 1st Floor : ทางเดินบันได #2									
21.1	2215743-28	24 Mar 2022	Day time	1	517	513.5	50	100	Pass
21.2	2215743-29	24 Mar 2022	Day time	2	510				
21.1	2215743-30	24 Mar 2022	Night time	1	201	202.0	50	100	Pass
21.2	2215743-31	24 Mar 2022	Night time	2	203				

**Measurement by** : Norranon Tathongkham Personnel of ALS Laboratory Group (Thailand) Co., Ltd.

**Guideline** : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

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418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O** : สัญญาเลขที่4600001511  
**Project Name** : Monitoring EIA  
**Project Location** : GNC

**Lot ID: 2215744**

Date Received : Mar 28, 2022  
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Report Number : 2272855-1

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Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot / Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
1	Spot - Control Building : 2nd Floor : CCTV Room Table								
2215744-1	24 Mar 2022	Day time	1	411	-	400-500	-	Pass	
2	Spot - Control Building : 2nd Floor : Control Room Desk 1								
2215744-2	24 Mar 2022	Night time	1	401	-	400-500	-	Pass	
3	Spot - Control Building : 2nd Floor : Control Room Desk 2								
2215744-3	24 Mar 2022	Night time	1	425	-	400-500	-	Pass	
4	Spot - Control Building : 2nd Floor : Control Room Desk 3								
2215744-4	24 Mar 2022	Night time	1	410	-	400-500	-	Pass	
5	Spot - Control Building : 2nd Floor : Control Room Desk 4								
2215744-5	24 Mar 2022	Night time	1	415	-	400-500	-	Pass	
6	Spot - Control Building : 2nd Floor : Control Room Desk 5								
2215744-6	24 Mar 2022	Night time	1	409	-	400-500	-	Pass	
7	Spot - Control Building : 2nd Floor : DCS Room No.1								
2215744-7	24 Mar 2022	Day time	1	361	-	200-300	-	Pass	
8	Spot - Control Building : 2nd Floor : DCS Room No.2								
2215744-8	24 Mar 2022	Day time	1	365	-	200-300	-	Pass	
9	Spot - Control Building : 2nd Floor : DCS Room No.3								
2215744-9	24 Mar 2022	Day time	1	350	-	200-300	-	Pass	
10	Spot - Control Building : 2nd Floor : DCS Room No.4								
2215744-10	24 Mar 2022	Day time	1	341	-	200-300	-	Pass	
11.1	Area - Control Building : 2nd Floor : DCS Walkway No.1								
2215744-11	24 Mar 2022	Day time	1	230	250.5	50	100	Pass	
11.2	2215744-12	24 Mar 2022	Day time	2	271				
12.1	Area - Control Building : 2nd Floor : DCS Walkway No.2								
2215744-13	24 Mar 2022	Day time	1	385	373.0	50	100	Pass	
12.2	2215744-14	24 Mar 2022	Day time	2	361				
13.1	Area - Control Building : 2nd Floor : DCS Walkway No.3								
2215744-15	24 Mar 2022	Day time	1	661	620.5	50	100	Pass	
13.2	2215744-16	24 Mar 2022	Day time	2	580				
14.1	Area - Control Building : 2nd Floor : DCS Walkway No.4								
2215744-17	24 Mar 2022	Day time	1	650	650.5	50	100	Pass	
14.2	2215744-18	24 Mar 2022	Day time	2	651				

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Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
Spot - Control Building : 2nd Floor : DSC Room Desk 1									
15	2215744-19	24 Mar 2022	Day time	1	411	-	400-500	-	Pass
15	2215744-20	24 Mar 2022	Night time	1	409	-	400-500	-	Pass
Spot - Control Building : 2nd Floor : Fax and Copy Room									
16	2215744-21	24 Mar 2022	Day time	1	350	-	300-400	-	Pass
Area - Control Building : 2nd Floor : Men Toilets									
17.1	2215744-22	24 Mar 2022	Day time	1	859	862.5	50	100	Pass
17.2	2215744-23	24 Mar 2022	Day time	2	866				
Spot - Control Building : 2nd Floor : Photocopier									
18	2215744-24	24 Mar 2022	Day time	1	410	-	300-400	-	Pass
Area - Control Building : 2nd Floor : Walkway									
19.1	2215744-25	24 Mar 2022	Day time	1	417	370.7	50	100	Pass
19.2	2215744-26	24 Mar 2022	Day time	2	326				
19.3	2215744-27	24 Mar 2022	Day time	3	369				
Area - Control Building : 2nd Floor : Women Toilets									
20.1	2215744-28	24 Mar 2022	Day time	1	811	815.5	50	100	Pass
20.2	2215744-29	24 Mar 2022	Day time	2	820				
Area - Control Building : 2nd Floor : ทางเดินก่อนเข้าห้อง Control Room #1									
21.1	2215744-30	24 Mar 2022	Night time	1	279	270.0	50	100	Pass
21.2	2215744-31	24 Mar 2022	Night time	2	261				
Area - Control Building : 2nd Floor : ทางเดินก่อนเข้าห้อง Control Room #2									
22.1	2215744-32	24 Mar 2022	Night time	1	289	295.5	50	100	Pass
22.2	2215744-33	24 Mar 2022	Night time	2	302				
Area - Control Building : 2nd Floor : ทางเดินบันได #1									
23.1	2215744-34	24 Mar 2022	Night time	1	105	113.0	50	100	Pass
23.2	2215744-35	24 Mar 2022	Night time	2	121				
Area - Control Building : 2nd Floor : ทางเดินบันได #2									
24.1	2215744-36	24 Mar 2022	Night time	1	109	109.5	50	100	Pass
24.2	2215744-37	24 Mar 2022	Night time	2	110				
Spot - Control Building : 2nd Floor : ห้องทำงาน Operation Manager									
25	2215744-38	24 Mar 2022	Day time	1	990	-	400-500	-	Pass
25	2215744-39	24 Mar 2022	Night time	1	941	-	400-500	-	Pass
Spot - Control Building : 2nd Floor : ห้องทำงาน Operation Office 1									
26	2215744-40	24 Mar 2022	Night time	1	447	-	400-500	-	Pass

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**P/O** : สัญญาเลขที่ 4600001511  
**Project Name** : Monitoring EIA  
**Project Location** : GNC

**Lot ID: 2215744**

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Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
Spot - Control Building : 2nd Floor : ห้องทำงาน Operation Office 2									
27	2215744-41	24 Mar 2022	Night time	1	435	-	400-500	-	Pass

**Measurement by** : Norranon Tathongkham Personnel of ALS Laboratory Group (Thailand) Co., Ltd.

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**Project Name** : Monitoring EIA  
**Project Location** : GNC

**Lot ID: 2215745**

Date Received : Mar 28, 2022  
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Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
	Area - Control Building : 3rd Floor : Canteen and Pantry Room								
1.1	2215745-1	24 Mar 2022	Day time	1	911	915.5	150	300	Pass
1.2	2215745-2	24 Mar 2022	Day time	2	920				
	Spot - Control Building : 3rd Floor : Computer Romm No.1								
2	2215745-3	24 Mar 2022	Day time	1	541	-	400-500	-	Pass
	Spot - Control Building : 3rd Floor : Computer Romm No.2								
3	2215745-4	24 Mar 2022	Day time	1	540	-	400-500	-	Pass
	Spot - Control Building : 3rd Floor : Control Room (Table No.1)								
4	2215745-5	24 Mar 2022	Day time	1	412	-	400-500	-	Pass
	Spot - Control Building : 3rd Floor : Control Room (Table No.2)								
5	2215745-6	24 Mar 2022	Day time	1	477	-	400-500	-	Pass
	Spot - Control Building : 3rd Floor : Control Room (Table No.3)								
6	2215745-7	24 Mar 2022	Day time	1	401	-	400-500	-	Pass
	Spot - Control Building : 3rd Floor : Control Room (Table No.4)								
7	2215745-8	24 Mar 2022	Day time	1	433	-	400-500	-	Pass
	Spot - Control Building : 3rd Floor : Control Room (Table No.5)								
8	2215745-9	24 Mar 2022	Day time	1	407	-	400-500	-	Pass
	Spot - Control Building : 3rd Floor : Control Room (Table No.6)								
9	2215745-10	24 Mar 2022	Day time	1	405	-	400-500	-	Pass
	Spot - Control Building : 3rd Floor : Control Room (Table No.7)								
10	2215745-11	24 Mar 2022	Day time	1	426	-	400-500	-	Pass
	Spot - Control Building : 3rd Floor : Control Room (Table No.8)								
11	2215745-12	24 Mar 2022	Day time	1	422	-	400-500	-	Pass
	Spot - Control Building : 3rd Floor : Control Room (Table No.9)								
12	2215745-13	24 Mar 2022	Day time	1	417	-	400-500	-	Pass
	Spot - Control Building : 3rd Floor : Operation Manager Table								
13	2215745-14	24 Mar 2022	Day time	1	998	-	400-500	-	Pass

**Measurement by** : Norranon Tathongkham Personnel of ALS Laboratory Group (Thailand) Co., Ltd.

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Assistant Manager

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## Analysis / Test Report

**Client** : Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O** : สัญญาเลขที่4600001511  
**Project Name** : Monitoring EIA  
**Project Location** : GNC

**Lot ID: 2215746**

Date Received : Mar 28, 2022  
Date Reported : Mar 30, 2022  
Report Number : 2272859-1

Page 1 of 1

Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
1	Spot - Electrical Building : 2nd Floor : ตู้ควบคุม 3 (10MKA10GH001 Generator Control Panel)								
	2215746-1	24 Mar 2022	Night time	1	401	-	200-300	-	Pass
2.1	Area - Electrical Building : 2nd Floor : ทางเดินภายในห้อง #1								
	2215746-2	24 Mar 2022	Night time	1	257	258.5	50	100	Pass
2.2	2215746-3	24 Mar 2022	Night time	2	260				
3.1	Area - Electrical Building : 2nd Floor : ทางเดินภายในห้อง #2								
	2215746-4	24 Mar 2022	Night time	1	259	249.5	50	100	Pass
3.2	2215746-5	24 Mar 2022	Night time	2	240				

**Measurement by** : Norranon Tathongkham Personnel of ALS Laboratory Group (Thailand) Co., Ltd.

**Guideline** : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

Supot Salamteh  
Section Head

Approved by

Wichan Choonharat  
Assistant Manager

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## Analysis / Test Report

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418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O** : สัญญาเลขที่4600001511  
**Project Name** : Monitoring EIA  
**Project Location** : GNC

**Lot ID: 2215747**

Date Received : Mar 28, 2022  
Date Reported : Mar 30, 2022  
Report Number : 2272861-1

Page 1 of 1

Page 2 of 3

Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
1	Spot - Electrical Building 1st Floor : ตัวควบคุม 1 (SA01)								
	2215747-1	24 Mar 2022	Night time	1	305	-	200-300	-	Pass
2	Spot - Electrical Building 1st Floor : ตัวควบคุม 2 (10BFA)								
	2215747-2	24 Mar 2022	Night time	1	425	-	200-300	-	Pass
3	Spot - Electrical Building 1st Floor : ตัวควบคุม 3 (10BUA01)								
	2215747-3	24 Mar 2022	Night time	1	411	-	200-300	-	Pass
4	Spot - Electrical Building 1st Floor : ตัวควบคุม 4 (10BRU01)								
	2215747-4	24 Mar 2022	Night time	1	510	-	200-300	-	Pass
5.1	Area - Electrical Building 1st Floor : ทางเดินบริเวณบันได #1								
	2215747-5	24 Mar 2022	Night time	1	631	576.5	50	100	Pass
5.2	2215747-6	24 Mar 2022	Night time	2	522				
6.1	Area - Electrical Building 1st Floor : ทางเดินบริเวณบันได #2								
	2215747-7	24 Mar 2022	Night time	1	603	607.0	50	100	Pass
6.2	2215747-8	24 Mar 2022	Night time	2	611				
7.1	Area - Electrical Building 1st Floor : ทางเดินภายในห้อง #1								
	2215747-9	24 Mar 2022	Night time	1	402	406.0	50	100	Pass
7.2	2215747-10	24 Mar 2022	Night time	2	410				
8.1	Area - Electrical Building 1st Floor : ทางเดินภายในห้อง #2								
	2215747-11	24 Mar 2022	Night time	1	150	147.5	50	100	Pass
8.2	2215747-12	24 Mar 2022	Night time	2	145				

**Measurement by** : Norranon Tathongkham Personnel of ALS Laboratory Group (Thailand) Co., Ltd.

**Guideline** : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

Supot Salamteh  
Section Head

Approved by

Wichan Choonharat  
Assistant Manager

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418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O** : สัญญาเลขที่4600001511  
**Project Name** : Monitoring EIA  
**Project Location** : GNC

**Lot ID: 2215748**

Date Received : Mar 28, 2022  
Date Reported : Mar 30, 2022  
Report Number : 2272863-1

Page 1 of 1

Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
1	Spot - Terminal & Switchyard Control Building : Battery Room No.1								
	2215748-1	24 Mar 2022	Day time	1	410	-	200-300	-	Pass
2	Spot - Terminal & Switchyard Control Building : Battery Room No.2								
	2215748-2	24 Mar 2022	Day time	1	409	-	200-300	-	Pass
3	Spot - Terminal & Switchyard Control Building : Switchgear Room No.1								
	2215748-3	24 Mar 2022	Day time	1	417	-	200-300	-	Pass
4	Spot - Terminal & Switchyard Control Building : Switchgear Room No.2								
	2215748-4	24 Mar 2022	Day time	1	405	-	200-300	-	Pass
5	Spot - Terminal & Switchyard Control Building : Switchyard Control Room No.1								
	2215748-5	24 Mar 2022	Day time	1	502	-	200-300	-	Pass
6	Spot - Terminal & Switchyard Control Building : Switchyard Control Room No.2								
	2215748-6	24 Mar 2022	Day time	1	510	-	200-300	-	Pass
7	Spot - Terminal & Switchyard Control Building : Terminal Control Room No.1								
	2215748-7	24 Mar 2022	Day time	1	561	-	200-300	-	Pass
8	Spot - Terminal & Switchyard Control Building : Terminal Control Room No.2								
	2215748-8	24 Mar 2022	Day time	1	570	-	200-300	-	Pass

**Measurement by** : Norranon Tathongkham Personnel of ALS Laboratory Group (Thailand) Co., Ltd.

**Guideline** : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

Supot Salamteh  
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418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O** : สัญญาเลขที่4600001511  
**Project Name** : Monitoring EIA  
**Project Location** : GNC

**Lot ID: 2215749**

Date Received : Mar 28, 2022  
Date Reported : Mar 31, 2022  
Report Number : 2272865-1

Page 1 of 2

Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
1	Spot - Warehouse and Workshop Building : 1st Floor : Maintenance Manager Table								
	2215749-1	24 Mar 2022	Day time	1	438	-	400-500	-	Pass
2.1	Area - Warehouse and Workshop Building : 1st Floor : Meeting Room								
	2215749-2	24 Mar 2022	Day time	1	1,097	1,069	150	300	Pass
2.2	2215749-3	24 Mar 2022	Day time	2	1,041				
3	Spot - Warehouse and Workshop Building : 1st Floor : Photocopier								
	2215749-4	24 Mar 2022	Day time	1	633	-	300-400	-	Pass
4.1	Area - Warehouse and Workshop Building : 1st Floor : Reception Room								
	2215749-5	24 Mar 2022	Day time	1	150	155.5	50	100	Pass
4.2	2215749-6	24 Mar 2022	Day time	2	161				
5.1	Area - Warehouse and Workshop Building : 1st Floor : Warehouse Canteen and Pantry Room								
	2215749-7	24 Mar 2022	Day time	1	361	337.5	150	300	Pass
5.2	2215749-8	24 Mar 2022	Day time	2	314				
6	Spot - Warehouse and Workshop Building : 1st Floor : Warehouse Officer Table No.1								
	2215749-9	24 Mar 2022	Day time	1	510	-	400-500	-	Pass
7	Spot - Warehouse and Workshop Building : 1st Floor : Warehouse Officer Table No.10								
	2215749-10	24 Mar 2022	Day time	1	502	-	400-500	-	Pass
8	Spot - Warehouse and Workshop Building : 1st Floor : Warehouse Officer Table No.11								
	2215749-11	24 Mar 2022	Day time	1	515	-	400-500	-	Pass
9	Spot - Warehouse and Workshop Building : 1st Floor : Warehouse Officer Table No.12								
	2215749-12	24 Mar 2022	Day time	1	490	-	400-500	-	Pass
10	Spot - Warehouse and Workshop Building : 1st Floor : Warehouse Officer Table No.2								
	2215749-13	24 Mar 2022	Day time	1	498	-	400-500	-	Pass
11	Spot - Warehouse and Workshop Building : 1st Floor : Warehouse Officer Table No.3								
	2215749-14	24 Mar 2022	Day time	1	505	-	400-500	-	Pass
12	Spot - Warehouse and Workshop Building : 1st Floor : Warehouse Officer Table No.4								
	2215749-15	24 Mar 2022	Day time	1	438	-	400-500	-	Pass
13	Spot - Warehouse and Workshop Building : 1st Floor : Warehouse Officer Table No.5								
	2215749-16	24 Mar 2022	Day time	1	462	-	400-500	-	Pass
14	Spot - Warehouse and Workshop Building : 1st Floor : Warehouse Officer Table No.6								
	2215749-17	24 Mar 2022	Day time	1	418	-	400-500	-	Pass
15	Spot - Warehouse and Workshop Building : 1st Floor : Warehouse Officer Table No.7								
	2215749-18	24 Mar 2022	Day time	1	526	-	400-500	-	Pass

Technical Management

Supot Salamteh  
Section Head

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Wichan Choonharat  
Assistant Manager

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## Analysis / Test Report

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418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O** : สัญญาเลขที่4600001511  
**Project Name** : Monitoring EIA  
**Project Location** : GNC

**Lot ID: 2215749**

Date Received : Mar 28, 2022  
Date Reported : Mar 31, 2022  
Report Number : 2272865-1

Page 2 of 2

Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot / Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
16	Spot - Warehouse and Workshop Building : 1st Floor : Warehouse Officer Table No.8								
16	2215749-19	24 Mar 2022	Day time	1	465	-	400-500	-	Pass
17	Spot - Warehouse and Workshop Building : 1st Floor : Warehouse Officer Table No.9								
17	2215749-20	24 Mar 2022	Day time	1	417	-	400-500	-	Pass

**Measurement by** : Norranon Tathongkham Personnel of ALS Laboratory Group (Thailand) Co., Ltd.

**Guideline** : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

Supot Salamteh  
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418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O** : สัญญาเลขที่ 4600001511  
**Project Name** : Monitoring EIA  
**Project Location** : GNC

**Lot ID: 2215750**

Date Received : Mar 28, 2022  
Date Reported : Mar 30, 2022  
Report Number : 2272867-1

Page 1 of 2

Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
1	Spot - Warehouse and Workshop Building : Ground Floor : C&I Cabinet								
	2215750-1	24 Mar 2022	Day time	1	740	-	400-500	-	Pass
2	Spot - Warehouse and Workshop Building : Ground Floor : C&I Table								
	2215750-2	24 Mar 2022	Day time	1	952	-	400-500	-	Pass
3.1	Area - Warehouse and Workshop Building : Ground Floor : Electrical Room/Fitness Room								
	2215750-3	24 Mar 2022	Day time	1	390	385.5	150	300	Pass
3.2	2215750-4	24 Mar 2022	Day time	2	381				
	Area - Warehouse and Workshop Building : Ground Floor : Equipment Storage Room No.1								
4.1	2215750-5	24 Mar 2022	Day time	1	603	612.5	100	200	Pass
4.2	2215750-6	24 Mar 2022	Day time	2	622				
	Area - Warehouse and Workshop Building : Ground Floor : Equipment Storage Room No.2								
5.1	2215750-7	24 Mar 2022	Day time	1	650	645.0	100	200	Pass
5.2	2215750-8	24 Mar 2022	Day time	2	640				
	Area - Warehouse and Workshop Building : Ground Floor : Equipment Storage Room No.3								
6.1	2215750-9	24 Mar 2022	Day time	1	721	716.0	100	200	Pass
6.2	2215750-10	24 Mar 2022	Day time	2	711				
	Spot - Warehouse and Workshop Building : Ground Floor : Instrument and Control Workshop								
7	2215750-11	24 Mar 2022	Day time	1	461	-	400-500	-	Pass
	Spot - Warehouse and Workshop Building : Ground Floor : Mechanical and Electrical Workshop Room (Table No.1)								
8	2215750-12	24 Mar 2022	Day time	1	584	-	400-500	-	Pass
	Spot - Warehouse and Workshop Building : Ground Floor : Mechanical and Electrical Workshop Room (Table No.2)								
9	2215750-13	24 Mar 2022	Day time	1	561	-	400-500	-	Pass
	Spot - Warehouse and Workshop Building : Ground Floor : Mechanical and Electrical Workshop Room (Table No.3)								
10	2215750-14	24 Mar 2022	Day time	1	717	-	400-500	-	Pass
	Area - Warehouse and Workshop Building : Ground Floor : Walkway No.1								
12.1	2215750-15	24 Mar 2022	Day time	1	740	695.5	50	100	Pass
12.2	2215750-16	24 Mar 2022	Day time	2	651				
	Area - Warehouse and Workshop Building : Ground Floor : Warehouse Room No.1								
13.1	2215750-17	24 Mar 2022	Day time	1	1,647	1,376	100	200	Pass
13.2	2215750-18	24 Mar 2022	Day time	2	1,105				
	Area - Warehouse and Workshop Building : Ground Floor : Warehouse Room No.2								
14.1	2215750-19	24 Mar 2022	Day time	1	1,105	1,107	100	200	Pass
14.2	2215750-20	24 Mar 2022	Day time	2	1,108				

Technical Management

Supot Salamteh  
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Assistant Manager

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## Analysis / Test Report

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418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O** : สัญญาเลขที่ 4600001511  
**Project Name** : Monitoring EIA  
**Project Location** : GNC

**Lot ID: 2215750**

Date Received : Mar 28, 2022  
Date Reported : Mar 30, 2022  
Report Number : 2272867-1

Page 2 of 2

Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot /Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
Area - Warehouse and Workshop Building : Ground Floor : Warehouse Room No.3									
15.1	2215750-21	24 Mar 2022	Day time	1	1,049	1,050	100	200	Pass
15.2	2215750-22	24 Mar 2022	Day time	2	1,051				

**Measurement by** : Norranon Tathongkham Personnel of ALS Laboratory Group (Thailand) Co., Ltd.

**Guideline** : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

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## Analysis / Test Report

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418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O** : สัญญาเลขที่4600001511  
**Project Name** : Monitoring EIA  
**Project Location** : GNC

**Lot ID: 2215751**

Date Received : Mar 28, 2022  
Date Reported : Mar 30, 2022  
Report Number : 2272869-1

Page 1 of 1

Lay out No.	Reference Number	Measurement Date	Measurement Time	Spot / Area No.	Illuminance (Lux)		Guideline Limit		Comment
					Spot	Average	Spot/Min	Average	
Spot - Water Treatment Control Building : Laboratory (หน้า Hood)									
1	2215751-1	24 Mar 2022	Night time	1	541	-	400-500	-	Pass
Spot - Water Treatment Control Building : Laboratory (หน้า Spectrophotometer)									
2	2215751-2	24 Mar 2022	Night time	1	765	-	400-500	-	Pass
Spot - Water Treatment Control Building : Laboratory (หน้าโต๊ะวัด pH)									
3	2215751-3	24 Mar 2022	Night time	1	561	-	400-500	-	Pass
Area - Water Treatment Control Building : ทางเดินหน้าห้อง Laboratory #1									
4.1	2215751-4	24 Mar 2022	Night time	1	65	68.5	25	50	Pass
4.2	2215751-5	24 Mar 2022	Night time	2	72				
Area - Water Treatment Control Building : ทางเดินหน้าห้อง Laboratory #2									
5.1	2215751-6	24 Mar 2022	Night time	1	77	76.0	25	50	Pass
5.2	2215751-7	24 Mar 2022	Night time	2	75				

**Measurement by** : Norranon Tathongkham Personnel of ALS Laboratory Group (Thailand) Co., Ltd.

**Guideline** : Notification of Department of Labour Protection and Welfare, B.E.2560 (2017) dated November 27, B.E.2560 (2017), and published in the Royal Government Gazette, Vol.135, Part 39D dated February 21 B.E.2561 (2018)

Technical Management

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การตรวจสอบความถูกต้องของระบบ CEMs ประจำปี พ.ศ. 2565



## Analysis / Test Report

TESTING  
No.0009

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** สัญญาเลขที่ 4600001511  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 21147476**

Date Received : May 25, 2022  
Date Reported : Jun 07, 2022  
Report Number: 2179727-1

Page 1 of 10

**Sample Number** 21147476-2  
**Sampled Date** May 23, 2022  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 11  
**Date Analysis Commenced** May 28, 2022  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish and one amber plastic bottle

### Stack Description

Ambient Pressure	756	mmHg	Diameter	3.35	m	Oxygen	14.3	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	3.9	%
Type of Process	Combustion		Stack Temperature	113	°C	Gas Velocity	14.7	m/s
Type of Fuel	Natural Gas		Moisture	8.16	%	Flow Rate (Actual O2)	328496	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result at 7 %O <sub>2</sub>	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Total Suspended Particulate	11:30 AM - 12:30 PM	mg/m <sup>3</sup>	-	0.5	<0.5	30	60	US EPA, Method 5	Bangkok

**Guideline :** Guideline (1) Environmental Impact Assessment Report of Gulf NC Co., Ltd.  
Guideline (2) Notification of the Ministry of Natural Resources and Environment, 2010 (B.E. 2553) on Emission Standard from New Power Plants.

Technical Management

*Saranya C.*  
Saranya Chalermthamrong  
Scientist (4)  
ทะเบียนเลขที่ ว-204-จ-4717

Approved by

*Kanok Korn Anek*  
Kanok Korn Anek  
Senior Manager  
ทะเบียนเลขที่ ว-204-ค-6111

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company



## Analysis / Test Report

TESTING  
No.0009

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** สัญญาเลขที่ 4600001511  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 21147476**

Date Received : May 25, 2022  
Date Reported : Jun 07, 2022  
Report Number: 2179727-1

Page 2 of 10

**Sample Number** 21147476-2  
**Sampled Date** May 23, 2022  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 11  
**Date Analysis Commenced** May 28, 2022  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish and one amber plastic bottle

### Stack Description

Ambient Pressure	756	mmHg	Diameter	3.35	m	Oxygen	14.3	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	3.9	%
Type of Process	Combustion		Stack Temperature	113	°C	Gas Velocity	14.7	m/s
Type of Fuel	Natural Gas		Moisture	8.16	%	Flow Rate (Actual O2)	328496	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result Emission Rate	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Total Suspended Particulate *	11:30 AM - 12:30 PM	g/s	-	-	<0.046	1.7	-	Calculated	Bangkok

**Guideline :** Guideline (1) Environmental Impact Assessment Report of Gulf NC Co., Ltd.  
Guideline (2) Notification of the Ministry of Natural Resources and Environment, 2010 (B.E. 2553) on Emission Standard from New Power Plants.

**Sampled By :** Thitipong Buadaeng

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked \* is/are not included in scope of Accreditation ISO/IEC 17025.

Technical Management

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## Analysis / Test Report

TESTING  
No.0009

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** สัญญาเลขที่ 4600001511  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 21147476**

Date Received : May 25, 2022  
Date Reported : Jun 07, 2022  
Report Number: 2179727-1

Page 3 of 10

**Sample Number** 21147476-3  
**Sampled Date** May 23, 2022  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 11  
**Date Analysis Commenced** May 28, 2022  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish and one amber plastic bottle

### Stack Description

Ambient Pressure	756	mmHg	Diameter	3.35	m	Oxygen	14.7	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	3.7	%
Type of Process	Combustion		Stack Temperature	114	°C	Gas Velocity	14.7	m/s
Type of Fuel	Natural Gas		Moisture	7.87	%	Flow Rate (Actual O2)	329255	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result at 7 %O <sub>2</sub>	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Total Suspended Particulate	12:35 PM - 01:35 PM	mg/m <sup>3</sup>	-	0.5	<0.5	30	60	US EPA, Method 5	Bangkok

**Guideline :** Guideline (1) Environmental Impact Assessment Report of Gulf NC Co., Ltd.  
Guideline (2) Notification of the Ministry of Natural Resources and Environment, 2010 (B.E. 2553) on Emission Standard from New Power Plants.

Technical Management

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## Analysis / Test Report

TESTING  
No.0009

**Client :** Gulf NC Co., Ltd.  
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**P/O :** สัญญาเลขที่ 4600001511  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 21147476**

Date Received : May 25, 2022  
Date Reported : Jun 07, 2022  
Report Number: 2179727-1

Page 4 of 10

**Sample Number** 21147476-3  
**Sampled Date** May 23, 2022  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 11  
**Date Analysis Commenced** May 28, 2022  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish and one amber plastic bottle

### Stack Description

Ambient Pressure	756	mmHg	Diameter	3.35	m	Oxygen	14.7	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	3.7	%
Type of Process	Combustion		Stack Temperature	114	°C	Gas Velocity	14.7	m/s
Type of Fuel	Natural Gas		Moisture	7.87	%	Flow Rate (Actual O2)	329255	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result Emission Rate	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Total Suspended Particulate *	12:35 PM - 01:35 PM	g/s	-	-	<0.046	1.7	-	Calculated	Bangkok

**Guideline :** Guideline (1) Environmental Impact Assessment Report of Gulf NC Co., Ltd.  
Guideline (2) Notification of the Ministry of Natural Resources and Environment, 2010 (B.E. 2553) on Emission Standard from New Power Plants.

**Sampled By :** Thitipong Buadaeng

Remark :

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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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## Analysis / Test Report

TESTING  
No.0009

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** สัญญาเลขที่ 4600001511  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 21147476**

Date Received : May 25, 2022  
Date Reported : Jun 07, 2022  
Report Number: 2179727-1

Page 5 of 10

**Sample Number** 21147476-4  
**Sampled Date** May 23, 2022  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 11  
**Date Analysis Commenced** May 28, 2022  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish and one amber plastic bottle

### Stack Description

Ambient Pressure	756	mmHg	Diameter	3.35	m	Oxygen	14.3	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	3.9	%
Type of Process	Combustion		Stack Temperature	113	°C	Gas Velocity	14.7	m/s
Type of Fuel	Natural Gas		Moisture	7.98	%	Flow Rate (Actual O2)	329026	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result at 7 %O <sub>2</sub>	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Total Suspended Particulate	01:40 PM - 02:40 PM	mg/m <sup>3</sup>	-	0.5	<0.5	30	60	US EPA, Method 5	Bangkok

**Guideline :** Guideline (1) Environmental Impact Assessment Report of Gulf NC Co., Ltd.  
Guideline (2) Notification of the Ministry of Natural Resources and Environment, 2010 (B.E. 2553) on Emission Standard from New Power Plants.

Technical Management

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## Analysis / Test Report

TESTING  
No.0009

**Client :** Gulf NC Co., Ltd.  
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**P/O :** สัญญาเลขที่ 4600001511  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 21147476**

Date Received : May 25, 2022  
Date Reported : Jun 07, 2022  
Report Number: 2179727-1

Page 6 of 10

**Sample Number** 21147476-4  
**Sampled Date** May 23, 2022  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 11  
**Date Analysis Commenced** May 28, 2022  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish and one amber plastic bottle

### Stack Description

Ambient Pressure	756	mmHg	Diameter	3.35	m	Oxygen	14.3	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	3.9	%
Type of Process	Combustion		Stack Temperature	113	°C	Gas Velocity	14.7	m/s
Type of Fuel	Natural Gas		Moisture	7.98	%	Flow Rate (Actual O2)	329026	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result Emission Rate	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Total Suspended Particulate *	01:40 PM - 02:40 PM	g/s	-	-	<0.046	1.7	-	Calculated	Bangkok

**Guideline :** Guideline (1) Environmental Impact Assessment Report of Gulf NC Co., Ltd.  
Guideline (2) Notification of the Ministry of Natural Resources and Environment, 2010 (B.E. 2553) on Emission Standard from New Power Plants.

**Sampled By :** Thitipong Buadaeng

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Technical Management

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## Analysis / Test Report

TESTING  
No.0009

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**P/O :** สัญญาเลขที่ 4600001511  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 21147476**  
Date Received : May 25, 2022  
Date Reported : Jun 07, 2022  
Report Number: 2179727-1

Page 7 of 10

**Sample Number** 21147476-5  
**Sampled Date** May 23, 2022  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 11  
**Date Analysis Commenced** May 28, 2022  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish and one amber plastic bottle

### Stack Description

Ambient Pressure	756	mmHg	Diameter	3.35	m	Oxygen	14.6	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	3.7	%
Type of Process	Combustion		Stack Temperature	112	°C	Gas Velocity	14.7	m/s
Type of Fuel	Natural Gas		Moisture	8.19	%	Flow Rate (Actual O2)	328751	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result at 7 %O <sub>2</sub>	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Total Suspended Particulate	02:45 PM - 03:45 PM	mg/m <sup>3</sup>	-	0.5	<0.5	30	60	US EPA, Method 5	Bangkok

**Guideline :** Guideline (1) Environmental Impact Assessment Report of Gulf NC Co., Ltd.  
Guideline (2) Notification of the Ministry of Natural Resources and Environment, 2010 (B.E. 2553) on Emission Standard from New Power Plants.

Technical Management

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**P/O :** สัญญาเลขที่ 4600001511  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 21147476**

Date Received : May 25, 2022  
Date Reported : Jun 07, 2022  
Report Number: 2179727-1

Page 8 of 10

**Sample Number** 21147476-5  
**Sampled Date** May 23, 2022  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 11  
**Date Analysis Commenced** May 28, 2022  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish and one amber plastic bottle

### Stack Description

Ambient Pressure	756	mmHg	Diameter	3.35	m	Oxygen	14.6	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	3.7	%
Type of Process	Combustion		Stack Temperature	112	°C	Gas Velocity	14.7	m/s
Type of Fuel	Natural Gas		Moisture	8.19	%	Flow Rate (Actual O2)	328751	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result Emission Rate	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Total Suspended Particulate *	02:45 PM - 03:45 PM	g/s	-	-	<0.046	1.7	-	Calculated	Bangkok

**Guideline :** Guideline (1) Environmental Impact Assessment Report of Gulf NC Co., Ltd.  
Guideline (2) Notification of the Ministry of Natural Resources and Environment, 2010 (B.E. 2553) on Emission Standard from New Power Plants.

**Sampled By :** Thitipong Buadaeng

Remark :

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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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**Technical Management**

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## Analysis / Test Report

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418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** สัญญาเลขที่ 4600001511  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 21147476**  
Date Received : May 25, 2022  
Date Reported : Jun 07, 2022  
Report Number: 2179727-1

Page 9 of 10

**Sample Number** 21147476-6  
**Sampled Date** May 23, 2022  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 11  
**Date Analysis Commenced** May 28, 2022  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish and one amber plastic bottle

### Stack Description

Ambient Pressure	756	mmHg	Diameter	3.35	m	Oxygen	14.3	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	3.9	%
Type of Process	Combustion		Stack Temperature	113	°C	Gas Velocity	14.7	m/s
Type of Fuel	Natural Gas		Moisture	8.31	%	Flow Rate (Actual O2)	328079	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result at 7 %O <sub>2</sub>	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Total Suspended Particulate	03:50 PM - 04:50 PM	mg/m <sup>3</sup>	-	0.5	<0.5	30	60	US EPA, Method 5	Bangkok

**Guideline :** Guideline (1) Environmental Impact Assessment Report of Gulf NC Co., Ltd.  
Guideline (2) Notification of the Ministry of Natural Resources and Environment, 2010 (B.E. 2553) on Emission Standard from New Power Plants.

Technical Management

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## Analysis / Test Report

TESTING  
No.0009

**Client :** Gulf NC Co., Ltd.  
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**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 21147476**

Date Received : May 25, 2022  
Date Reported : Jun 07, 2022  
Report Number: 2179727-1

Page 10 of 10

**Sample Number** 21147476-6  
**Sampled Date** May 23, 2022  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 11  
**Date Analysis Commenced** May 28, 2022  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish and one amber plastic bottle

### Stack Description

Ambient Pressure	756	mmHg	Diameter	3.35	m	Oxygen	14.3	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	3.9	%
Type of Process	Combustion		Stack Temperature	113	°C	Gas Velocity	14.7	m/s
Type of Fuel	Natural Gas		Moisture	8.31	%	Flow Rate (Actual O2)	328079	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result Emission Rate	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Total Suspended Particulate *	03:50 PM - 04:50 PM	g/s	-	-	<0.046	1.7	-	Calculated	Bangkok

**Guideline :** Guideline (1) Environmental Impact Assessment Report of Gulf NC Co., Ltd.  
Guideline (2) Notification of the Ministry of Natural Resources and Environment, 2010 (B.E. 2553) on Emission Standard from New Power Plants.

**Sampled By :** Thitipong Buadaeng

Remark :

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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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**Technical Management**

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## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :** สัญญาเลขที่ 4600001511

**Project Name :** Monitoring EIA

**Project Location :** GNC

**Lot ID: 21147476**

Date Received: May 25, 2022

Date Reported: Jun 28, 2022

Report Number: 2325888-1

Page 1 of 2

**Sample Number** 21147476-1  
**Sampled Date** May 23, 2022  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 11  
**Parameter** Relative Response Audit

### Relative Response Audit Test Report

No Sample	Date	Time		CEMS Values		RM Values (mg/m <sup>3</sup> )	Allowable Range		Criterion
		Start	Stop	(%Opacity)	(mg/m <sup>3</sup> )		Minimum	Maximum	
1	23-May-22	11:30	12:30	2.29	1.00	0.41	-6.00	8.00	Pass
2	23-May-22	12:35	13:35	2.08	0.91	0.00	-6.09	7.91	Pass
3	23-May-22	13:40	14:40	1.93	0.84	0.42	-6.16	7.84	Pass
4	23-May-22	14:45	15:45	1.86	0.80	0.00	-6.20	7.80	Pass
5	23-May-22	15:50	16:50	1.86	0.80	0.42	-6.20	7.80	Pass

Remark: -Relative Response Audit is refer to 40 CFR Part 60 Appendix B : Performance Specification 11 : Specifications and Test Procedures for Particulate Matter Continuous Emission Monitoring Systems at Stationary Source (PS-11)  
- Correlation Equation of Linear curve  $Y = 0.4554X - 0.0419$   
-Emission limit 28 mg/m3 from Environmental Impact Assessment Report of Gulf NC Co.,Ltd.

**Technical Management**

Wichan Choonharat  
Manager  
ทะเบียนเลขที่ ว-204-ค-6113

**Approved by**

Sarayuth Jitranont  
Assistant General Manager  
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## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :** สัญญาเลขที่ 4600001511

**Project Name :** Monitoring EIA

**Project Location :** GNC

**Lot ID: 21147476**

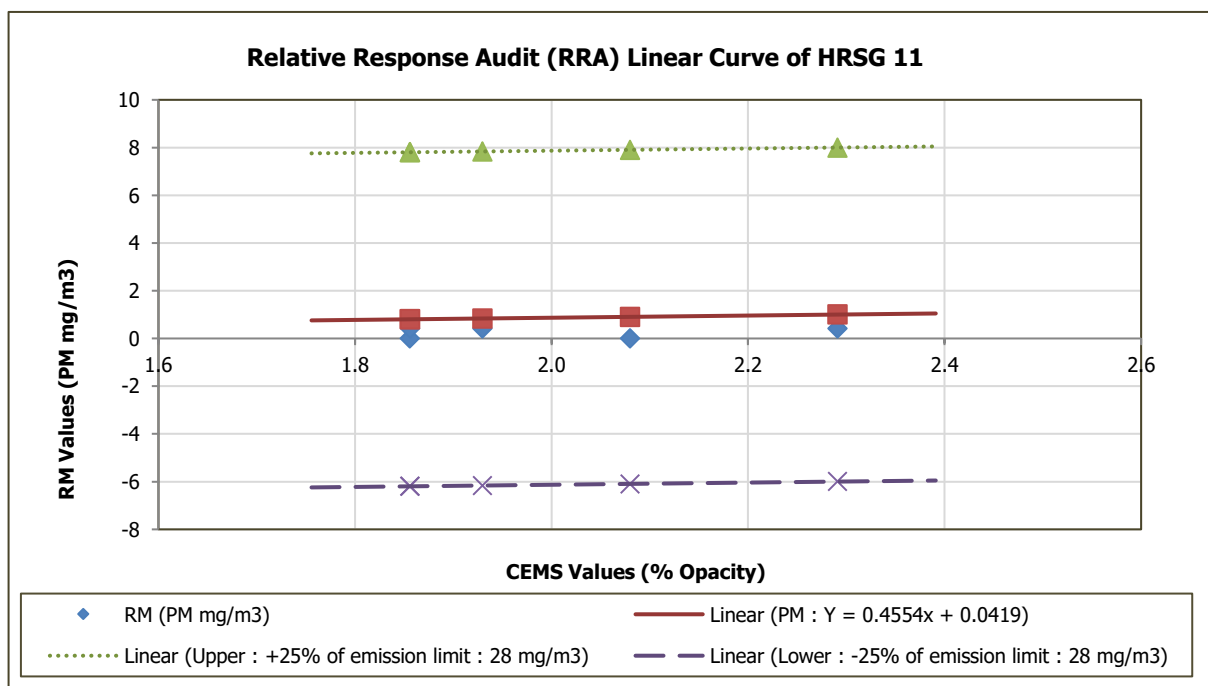
Date Received: May 25, 2022

Date Reported: Jun 28, 2022

Report Number: 2325888-1

Page 2 of 2

**Sample Number** 21147476-1  
**Sampled Date** May 23, 2022  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 11  
**Parameter** Relative Response Audit



**Sampled By :** Thitipong Buadaeng

**Technical Management**

*Wichan Choonharat*

Wichan Choonharat  
Manager  
ทะเบียนเลขที่ ว-204-ค-6113

**Approved by**

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## Analysis / Test Report

TESTING  
No.0009

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** สัญญาเลขที่ 4600001511  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 21147480**

Date Received : May 25, 2022  
Date Reported : Jun 07, 2022  
Report Number: 2179732-1

Page 1 of 10

**Sample Number** 21147480-2  
**Sampled Date** May 24, 2022  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 12  
**Date Analysis Commenced** May 28, 2022  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish and one amber plastic bottle

### Stack Description

Ambient Pressure	756	mmHg	Diameter	3.35	m	Oxygen	14.6	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	3.7	%
Type of Process	Combustion		Stack Temperature	110	°C	Gas Velocity	14.3	m/s
Type of Fuel	Natural Gas		Moisture	7.42	%	Flow Rate (Actual O2)	324777	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result at 7 %O <sub>2</sub>	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Total Suspended Particulate	10:30 AM - 11:30 AM	mg/m <sup>3</sup>	-	0.5	<0.5	30	60	US EPA, Method 5	Bangkok

**Guideline :** Guideline (1) Environmental Impact Assessment Report of Gulf NC Co., Ltd.  
Guideline (2) Notification of the Ministry of Natural Resources and Environment, 2010 (B.E. 2553) on Emission Standard from New Power Plants.

Technical Management

*Saranya C.*  
Saranya Chalermthamrong  
Scientist (4)  
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Approved by

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Kanok Korn Anek  
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ทะเบียนเลขที่ ว-204-ค-6111

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## Analysis / Test Report

TESTING  
No.0009

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** สัญญาเลขที่ 4600001511  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 21147480**

Date Received : May 25, 2022  
Date Reported : Jun 07, 2022  
Report Number: 2179732-1

Page 2 of 10

**Sample Number** 21147480-2  
**Sampled Date** May 24, 2022  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 12  
**Date Analysis Commenced** May 28, 2022  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish and one amber plastic bottle

### Stack Description

Ambient Pressure	756	mmHg	Diameter	3.35	m	Oxygen	14.6	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	3.7	%
Type of Process	Combustion		Stack Temperature	110	°C	Gas Velocity	14.3	m/s
Type of Fuel	Natural Gas		Moisture	7.42	%	Flow Rate (Actual O2)	324777	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result Emission Rate	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Total Suspended Particulate *	10:30 AM - 11:30 AM	g/s	-	-	<0.046	1.7	-	Calculated	Bangkok

**Guideline :** Guideline (1) Environmental Impact Assessment Report of Gulf NC Co., Ltd.  
Guideline (2) Notification of the Ministry of Natural Resources and Environment, 2010 (B.E. 2553) on Emission Standard from New Power Plants.

**Sampled By :** Thitipong Buadaeng

Remark :

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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked \* is/are not included in scope of Accreditation ISO/IEC 17025.

**Technical Management**

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## Analysis / Test Report

TESTING  
No.0009

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418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** สัญญาเลขที่ 4600001511  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 21147480**

Date Received : May 25, 2022  
Date Reported : Jun 07, 2022  
Report Number: 2179732-1

Page 3 of 10

**Sample Number** 21147480-3  
**Sampled Date** May 24, 2022  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 12  
**Date Analysis Commenced** May 28, 2022  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish and one amber plastic bottle

### Stack Description

Ambient Pressure	756	mmHg	Diameter	3.35	m	Oxygen	14.6	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	3.9	%
Type of Process	Combustion		Stack Temperature	110	°C	Gas Velocity	14.3	m/s
Type of Fuel	Natural Gas		Moisture	7.66	%	Flow Rate (Actual O2)	323925	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result at 7 %O <sub>2</sub>	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Total Suspended Particulate	11:35 AM - 12:35 PM	mg/m3	-	0.5	<0.5	30	60	US EPA, Method 5	Bangkok

**Guideline :** Guideline (1) Environmental Impact Assessment Report of Gulf NC Co., Ltd.  
Guideline (2) Notification of the Ministry of Natural Resources and Environment, 2010 (B.E. 2553) on Emission Standard from New Power Plants.

Technical Management

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## Analysis / Test Report

TESTING  
No.0009

**Client :** Gulf NC Co., Ltd.  
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**P/O :** สัญญาเลขที่ 4600001511  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 21147480**

Date Received : May 25, 2022  
Date Reported : Jun 07, 2022  
Report Number: 2179732-1

Page 4 of 10

**Sample Number** 21147480-3  
**Sampled Date** May 24, 2022  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 12  
**Date Analysis Commenced** May 28, 2022  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish and one amber plastic bottle

### Stack Description

Ambient Pressure	756	mmHg	Diameter	3.35	m	Oxygen	14.6	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	3.9	%
Type of Process	Combustion		Stack Temperature	110	°C	Gas Velocity	14.3	m/s
Type of Fuel	Natural Gas		Moisture	7.66	%	Flow Rate (Actual O2)	323925	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result Emission Rate	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Total Suspended Particulate *	11:35 AM - 12:35 PM	g/s	-	-	<0.044	1.7	-	Calculated	Bangkok

**Guideline :** Guideline (1) Environmental Impact Assessment Report of Gulf NC Co., Ltd.  
Guideline (2) Notification of the Ministry of Natural Resources and Environment, 2010 (B.E. 2553) on Emission Standard from New Power Plants.

**Sampled By :** Thitipong Buadaeng

Remark :

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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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**Technical Management**

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## Analysis / Test Report

TESTING  
No.0009

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**P/O :** สัญญาเลขที่ 4600001511  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 21147480**

Date Received : May 25, 2022  
Date Reported : Jun 07, 2022  
Report Number: 2179732-1

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**Sample Number** 21147480-4  
**Sampled Date** May 24, 2022  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 12  
**Date Analysis Commenced** May 28, 2022  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish and one amber plastic bottle

### Stack Description

Ambient Pressure	756	mmHg	Diameter	3.35	m	Oxygen	14.6	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	3.7	%
Type of Process	Combustion		Stack Temperature	110	°C	Gas Velocity	14.3	m/s
Type of Fuel	Natural Gas		Moisture	7.67	%	Flow Rate (Actual O2)	323852	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result at 7 %O <sub>2</sub>	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Total Suspended Particulate	12:40 PM - 01:40 PM	mg/m <sup>3</sup>	-	0.5	<0.5	30	60	US EPA, Method 5	Bangkok

**Guideline :** Guideline (1) Environmental Impact Assessment Report of Gulf NC Co., Ltd.  
Guideline (2) Notification of the Ministry of Natural Resources and Environment, 2010 (B.E. 2553) on Emission Standard from New Power Plants.

Technical Management

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Approved by

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## Analysis / Test Report

TESTING  
No.0009

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** สัญญาเลขที่ 4600001511  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 21147480**

Date Received : May 25, 2022  
Date Reported : Jun 07, 2022  
Report Number: 2179732-1

Page 6 of 10

**Sample Number** 21147480-4  
**Sampled Date** May 24, 2022  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 12  
**Date Analysis Commenced** May 28, 2022  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish and one amber plastic bottle

### Stack Description

Ambient Pressure	756	mmHg	Diameter	3.35	m	Oxygen	14.6	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	3.7	%
Type of Process	Combustion		Stack Temperature	110	°C	Gas Velocity	14.3	m/s
Type of Fuel	Natural Gas		Moisture	7.67	%	Flow Rate (Actual O2)	323852	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result Emission Rate	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Total Suspended Particulate *	12:40 PM - 01:40 PM	g/s	-	-	<0.045	1.7	-	Calculated	Bangkok

**Guideline :** Guideline (1) Environmental Impact Assessment Report of Gulf NC Co., Ltd.  
Guideline (2) Notification of the Ministry of Natural Resources and Environment, 2010 (B.E. 2553) on Emission Standard from New Power Plants.

**Sampled By :** Thitipong Buadaeng

Remark :

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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked \* is/are not included in scope of Accreditation ISO/IEC 17025.

**Technical Management**

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## Analysis / Test Report

TESTING  
No.0009

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** สัญญาเลขที่ 4600001511  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 21147480**

Date Received : May 25, 2022  
Date Reported : Jun 07, 2022  
Report Number: 2179732-1

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**Sample Number** 21147480-5  
**Sampled Date** May 24, 2022  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 12  
**Date Analysis Commenced** May 28, 2022  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish and one amber plastic bottle

### Stack Description

Ambient Pressure	756	mmHg	Diameter	3.35	m	Oxygen	14.6	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	3.7	%
Type of Process	Combustion		Stack Temperature	110	°C	Gas Velocity	14.3	m/s
Type of Fuel	Natural Gas		Moisture	7.66	%	Flow Rate (Actual O2)	324096	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result at 7 %O <sub>2</sub>	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Total Suspended Particulate	01:45 PM - 02:45 PM	mg/m <sup>3</sup>	-	0.5	<0.5	30	60	US EPA, Method 5	Bangkok

**Guideline :** Guideline (1) Environmental Impact Assessment Report of Gulf NC Co., Ltd.  
Guideline (2) Notification of the Ministry of Natural Resources and Environment, 2010 (B.E. 2553) on Emission Standard from New Power Plants.

Technical Management

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## Analysis / Test Report

TESTING  
No.0009

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** สัญญาเลขที่ 4600001511  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 21147480**

Date Received : May 25, 2022  
Date Reported : Jun 07, 2022  
Report Number: 2179732-1

Page 8 of 10

**Sample Number** 21147480-5  
**Sampled Date** May 24, 2022  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 12  
**Date Analysis Commenced** May 28, 2022  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish and one amber plastic bottle

### Stack Description

Ambient Pressure	756	mmHg	Diameter	3.35	m	Oxygen	14.6	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	3.7	%
Type of Process	Combustion		Stack Temperature	110	°C	Gas Velocity	14.3	m/s
Type of Fuel	Natural Gas		Moisture	7.66	%	Flow Rate (Actual O2)	324096	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result Emission Rate	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Total Suspended Particulate *	01:45 PM - 02:45 PM	g/s	-	-	<0.045	1.7	-	Calculated	Bangkok

**Guideline :** Guideline (1) Environmental Impact Assessment Report of Gulf NC Co., Ltd.  
Guideline (2) Notification of the Ministry of Natural Resources and Environment, 2010 (B.E. 2553) on Emission Standard from New Power Plants.

**Sampled By :** Thitipong Buadaeng

Remark :

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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked \* is/are not included in scope of Accreditation ISO/IEC 17025.

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**Approved by**

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TESTING  
No.0009

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**P/O :** สัญญาเลขที่ 4600001511  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 21147480**

Date Received : May 25, 2022  
Date Reported : Jun 07, 2022  
Report Number: 2179732-1

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**Sample Number** 21147480-6  
**Sampled Date** May 24, 2022  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 12  
**Date Analysis Commenced** May 28, 2022  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish and one amber plastic bottle

### Stack Description

Ambient Pressure	756	mmHg	Diameter	3.35	m	Oxygen	14.6	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	3.7	%
Type of Process	Combustion		Stack Temperature	110	°C	Gas Velocity	14.3	m/s
Type of Fuel	Natural Gas		Moisture	7.70	%	Flow Rate (Actual O2)	323966	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result at 7 %O <sub>2</sub>	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Total Suspended Particulate	02:50 PM - 03:50 PM	mg/m <sup>3</sup>	-	0.5	<0.5	30	60	US EPA, Method 5	Bangkok

**Guideline :** Guideline (1) Environmental Impact Assessment Report of Gulf NC Co., Ltd.  
Guideline (2) Notification of the Ministry of Natural Resources and Environment, 2010 (B.E. 2553) on Emission Standard from New Power Plants.

Technical Management

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Approved by

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## Analysis / Test Report

TESTING  
No.0009

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110  
**P/O :** สัญญาเลขที่ 4600001511  
**Project Name :** Monitoring EIA  
**Project Location :** GNC

**Lot ID: 21147480**

Date Received : May 25, 2022  
Date Reported : Jun 07, 2022  
Report Number: 2179732-1

Page 10 of 10

**Sample Number** 21147480-6  
**Sampled Date** May 24, 2022  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 12  
**Date Analysis Commenced** May 28, 2022  
**Condition of Sample** Extracted into one filter paper placed in plastic petri dish and one amber plastic bottle

### Stack Description

Ambient Pressure	756	mmHg	Diameter	3.35	m	Oxygen	14.6	%
Ambient Temperature	32.0	°C	Shape	Circle		Carbon Dioxide	3.7	%
Type of Process	Combustion		Stack Temperature	110	°C	Gas Velocity	14.3	m/s
Type of Fuel	Natural Gas		Moisture	7.70	%	Flow Rate (Actual O2)	323966	Nm3/hr

Analyte	Sampled Time	Unit	LOD	LOQ (LOR)	Result Emission Rate	Guideline (1)	Guideline (2)	Method	Testing Location
<b>Air Testing</b>									
Total Suspended Particulate *	02:50 PM - 03:50 PM	g/s	-	-	<0.045	1.7	-	Calculated	Bangkok

**Guideline :** Guideline (1) Environmental Impact Assessment Report of Gulf NC Co., Ltd.  
Guideline (2) Notification of the Ministry of Natural Resources and Environment, 2010 (B.E. 2553) on Emission Standard from New Power Plants.

**Sampled By :** Thitipong Buadaeng

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked \* is/are not included in scope of Accreditation ISO/IEC 17025.

Technical Management

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## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :** สัญญาเลขที่ 4600001511

**Project Name :** Monitoring EIA

**Project Location :** GNC

**Lot ID: 21147480**

Date Received: May 25, 2022

Date Reported: Jun 28, 2022

Report Number: 2325887-1

Page 1 of 2

**Sample Number** 21147480-1  
**Sampled Date** May 24, 2022  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 12  
**Parameter** Relative Response Audit

### Relative Response Audit Test Report

No Sample	Date	Time		CEMS Values		RM Values (mg/m <sup>3</sup> )	Allowable Range		Criterion
		Start	Stop	(%Opacity)	(mg/m <sup>3</sup> )		Minimum	Maximum	
1	24-May-22	10:30	11:30	1.38	0.66	0.49	-6.34	7.66	Pass
2	24-May-22	11:35	12:35	1.45	0.68	0.29	-6.32	7.68	Pass
3	24-May-22	12:40	13:40	1.52	0.71	0.29	-6.29	7.71	Pass
4	24-May-22	13:45	14:45	1.48	0.70	0.39	-6.30	7.70	Pass
5	24-May-22	14:50	15:38	1.63	0.75	0.00	-6.25	7.75	Pass

Remark: -Relative Response Audit is refer to 40 CFR Part 60 Appendix B : Performance Specification 11 : Specifications and Test Procedures for Particulate Matter Continuous Emission Monitoring Systems at Stationary Source (PS-11)  
- Correlation Equation of Linear curve  $Y = 0.3628X + 0.1576$   
-Emission limit 28 mg/m3 from Environmental Impact Assessment Report of Gulf NC Co.,Ltd.

**Technical Management**

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**Approved by**

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## Analysis / Test Report

**Client :** Gulf NC Co., Ltd.  
418 Moo 1, Nontree, Kabin Buri, Prachinburi Thailand 25110

**P/O :** สัญญาเลขที่ 4600001511

**Project Name :** Monitoring EIA

**Project Location :** GNC

**Lot ID: 21147480**

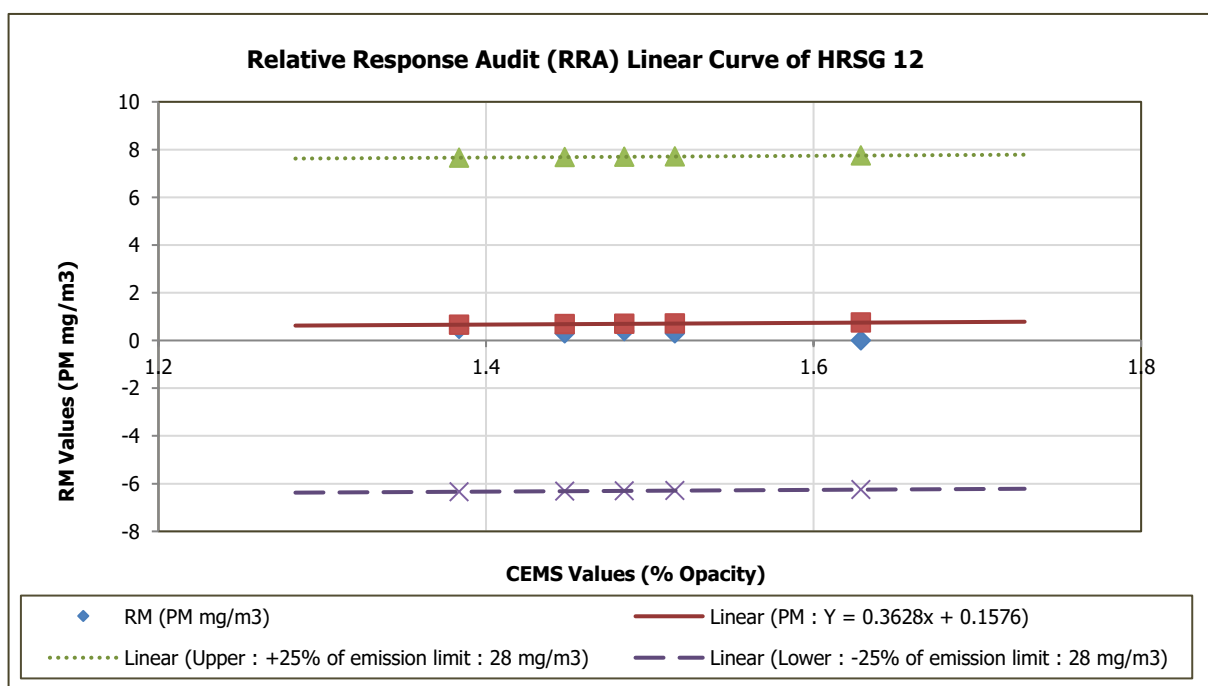
Date Received: May 25, 2022

Date Reported: Jun 28, 2022

Report Number: 2325887-1

Page 2 of 2

**Sample Number** 21147480-1  
**Sampled Date** May 24, 2022  
**Sample Description** Emission from Stationary Source  
**Location** ปล่อง HRSG 12  
**Parameter** Relative Response Audit



**Sampled By :** Thitipong Buadaeng

**Technical Management**

*Wichan Choonharat*

Wichan Choonharat  
Manager  
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